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(71) Applicant (for all designated States except US):  
**LEGGETT & PLATT, INCORPORATED** [US/US];  
No. 1 Leggett Road, Carthage, MO 64836 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ROSSETTO, Marco** [IT/IT]; Via Giambono, 18, I-30030 Venezia-Trivignano (IT). **COSTAGLIA, Massimo** [IT/IT]; Via Trieste, 36, I-35010 Santa Giustina in Colle (IT). **MAESTRI, Silvio** [IT/IT]; Via Castione Marchesi, I-40036 Fidenza (IT).

(74) Agents: **STROHM, Scott, B.** et al.; Shook, Hardy & Bacon L.L.P., One Kansas City Place, 1200 Main Street, Kansas City, MO 64105-2118 (US).

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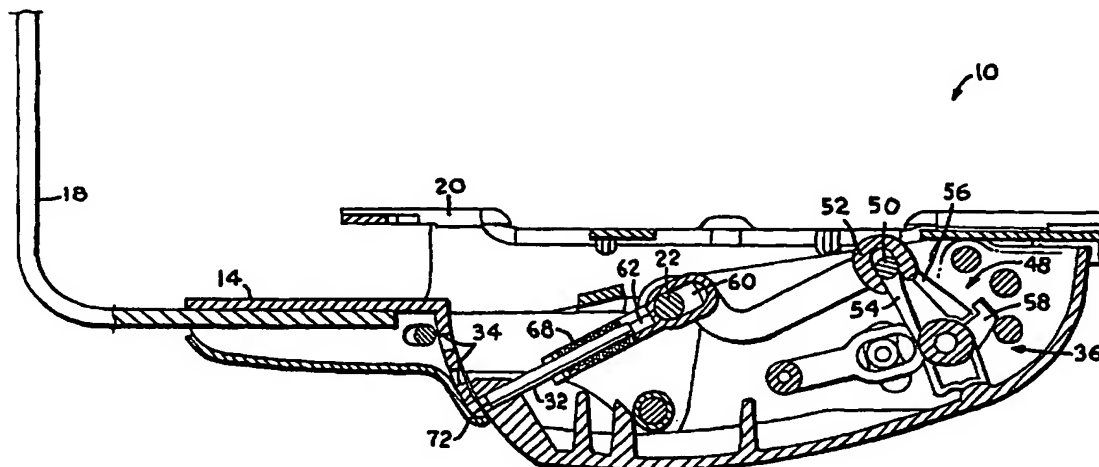
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(54) Title: SUPPORT FOR TILTING OR SYNCHRONIZED CHAIRS



(57) Abstract: A support for tilting or synchronized chair is provided. The device (10) includes a supporting frame (12), a mobile frame (14), an elastic member (24), a stiffness adjustment mechanism coupled with the elastic member, a locking mechanism for engaging the mobile frame with the supporting frame, and an actuation device for engaging and disengaging the locking mechanism. The actuation device includes a rocker arm (36) and a return arm (40). The return arm is connected to the end of the rocker arm that the locking mechanism is attached. The rocker arm has at least two positions of stable equilibrium that are determined by the engagement or disengagement of the locking mechanism. An alternative embodiment includes an outer shell having first and second pins that are coupled with the backrest frames. The second pin may be positioned within a slot formed in the shell so that the backrest frame may move between upright and reclined positions.

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/18421

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A47C 1/032  
US CL : 297/300.8, 301.7, 303.4

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
U.S. : 297/300.8, 301.7, 303.4, 300.4, 300.5, 300.6, 300.7, 301.5, 301.6, 302.7

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4,384,741 A (FLUM ET AL) 24 May 1983 (24.05.83), see figs. 1-6	1,11,21
A	US 5,765,914 A (BRITAIN ET AL) 16 June 1998 (16.06.98), see figs. 5,6	1,11,21
A	US 5,971,481 A (EMMENEGGER ET AL) 26 October 1999 (26.10.99), see fig. 5	1,11,21
A	US 6,033,020 A (ITO) 07 March 2000 (07.03.00), see fig. 1	1,11,21
A	US 6,010,189 A (HYBARGER ET AL) 04 January 2000 (04.01.00), see fig.3	1,11,21
A,P	US 6,450,577 B1 (ROSLUND, JR) 17 September 2002 (17.09.02), see fig. 4	1,11,21

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

\* Special categories of cited documents:

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Name and mailing address of the ISA/US  
Mail Stop PCT, Attn: ISA/US  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
Facsimile No. (703)305-3230

Authorized officer  
Peter R. Brown  
Telephone No. 703-308-1113